VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
LYNCHBURG SATELLITE OFFICE

FACT SHEET
FOR PROPOSED PERMITTING ACTION
UNDER 9 VAC 5 Chapter 80 Article 1 (TITLE V-CLEAN AIR ACT)

APPLICANT:

VA-30248 AIRS ID 51-031-0005

The Lane Company
701 Fifth Street
Altavista, VA 24517

FACILITY LOCATION:

701 Fifth Street, Altavista
UTM Coordinates are ZONE: 17 EASTING: 652.5 km NORTHING: 4108.2 km

FACILITY DESCRIPTION:

The Lane Company is a manufacturer of wood furniture covered by Standard Industrial Classification (SIC) Code 2511 [North American Industry Classification System (NAICS) Code 337122]. Operations at the facility can be conducted twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. Wood furniture and furniture parts are manufactured at the facility form rough-cut wood that is dried, milled, machined, sawed, and sanded. Furniture and parts are assembled, furniture is finished, and the furniture and parts are shipped.

Source Description

This source manufactures various types of wooden furniture at this facility. The facility is divided into 2 plants, Plant 2 and Plant 4. Portions of the facility are covered by permits. Emission units that are permitted include a wood/coal-fired boiler, Ref. No. B#5 (rated at 140 MMBtu/hr), with permits dated 10/24/77 and 8/16/00; 4 woodworking dust collection systems for dried wood controlled by fabric filters in Plant 4, Ref. Nos. BHS(A), BHS(B), BHS(C), & BHS(E), permitted 5/31/01; a woodworking dust collection system controlled by a high efficiency cyclone for wet wood, Ref. No. 0007, permitted 3/14/97; and finishing operations in Plant 4 and a repair spray booth in Plant 2, Ref. Nos. WC1 thru WC7 & 4623, permitted 5/31/01. Non-permitted emission units include wood dust collection systems controlled by cyclones or by fabric filters in Plant 2; the facilities main finishing operations in Plant 2, and 21 wood drying kilns.

Rough cut green hardwood and softwood is brought to the facility where it is dried in kilns. Some of the wood is sliced into thin veneer before it is dried. Steam for the kilns is provided by a nearby co-generation facility with the source's boiler as a backup steam source.. Furniture components are made from the wood by milling, machining, sawing, and sanding. All of the wood dust is collected by the facility's dust collection systems. Fabric filters and cyclones control all emissions from the dust collection systems. The wood dust is used as boiler fuel either at the neighboring co-generation facility or in the source's boiler. The wood drying operations are not permitted. Four of the 10 fabric filter controlled dust collection systems are permitted and 5 other fabric filters were installed as a result of a consent order in 1977.

The furniture components that are assembled use various adhesives, such as hot melt and white glue (similar to Elmer’s), which contain little or no VOCs. These emissions from gluing are fugitive in nature

and are not permitted.

The furniture is finished using the main finishing operations in Plant 2 and the finishing operations in Plant 4, which use solvent based finishes. The finishing operations consist of spray booths, a roll coater, and drying ovens. Heat for the ovens is supplied by steam from the nearby co-generation facility or the source's boiler. There are no controls for VOC emissions. Particulate emissions from most of the spray booths of the main finishing operation in Plant 2 are uncontrolled. One repair spray booth is permitted with required particulate controls and two other spray booths have voluntary particulate controls. All of the 7 spray booths in Plant 4 have particulate controls.

Process and space heat for the facility is provided by the nearby co-generation facility or the source's boiler. The source's 140 MMBtu/hr Erie City Works boiler burns wood as fuel, with coal as a backup fuel, when operated. Particulate emissions from the boiler are controlled by a multicyclone. The boiler was permitted in 1977 prior to installation. A permit issued in 1987 allowed the Erie City boiler and another boiler to use waste solvents as supplemental fuel. Because of Waste regulations the burning of waste solvents was soon discontinued. The other boiler was subsequently permanently shutdown. As a result of these changes the 1987 permit was superseded in 2000 to remove waste solvents as a supplemental fuel.

Compliance History

On 6/10/77 a Consent Order was issued for the installation of 5 fabric filters in order to collect and control sander dust which had been controlled by cyclones. On 10/24/77 a permit was issued to the source for the installation of an Erie City 140 MMBtu/hr boiler (Ref No. B#5). A permit was issued 7/22/87 to allow burning of solvent waste in boilers #3 (B#3) and #5 (B#5). Due to conflicts with Waste regulations the practice was discontinued and the 7/22/87 permit was superseded on 8/16/00 to remove the solvent burning conditions and to permanently shutdown boiler #3. Boiler #4 (B#4) is also permanently shutdown. A permit for the installation of a flatline finishing system was issued 8/6/93 and amended 5/15/95 and 1/3/96. This finishing system is being removed from the facility and the 8/6/93 permit and amendments were superceded by a 5/31/01 permit.

A review of DEQ inspection reports for the past 5 years was conducted. Inspection reports indicate the source has been in compliance.

EMISSIONS SUMMARY:

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]	
CRITERIA POLLUTANTS	2000 ESTIMATED EMISSIONS
Particulate Matter (PM_{10})	5.0
Nitrogen Oxides (NO_x)	0
Sulfur Dioxide (SO_2)	0
Carbon Monoxide (CO)	0
Volatile Organic Compounds (VOC)	224.0
HAZARDOUS AIR POLLUTANTS	

Combined HAPs	Greater than 25

TITLE V PROGRAM APPLICABILITY BASIS:

This facility has the potential to emit greater than 100 tons per year of VOCs and SO_2 and greater than 25 tons per year of HAPs. Due to this facility's potential to emit Lane Furniture Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1.

Applicable Requirements

Emissions Standards and Visible Emission Requirements

Fuel Burning Equipment (B#5)

A 140 MMBtu/hr Erie City wood/coal-fired boiler (B#5) is available to provide steam for process and space heat at the facility. The facility currently receives steam from a nearby co-generation facility. The boiler was permitted 10/24/77. The boiler is equipped with a multicyclone for particulate control. The 10/24/77 permit limited particulate emissions to 0.27 lbs/MMBtu of heat input and limited the sulfur content in the coal to 1.4%. Another permit was issued that included this boiler on 7/22/87. This permit was to allow the Erie City boiler and another boiler (now permanently shutdown) to burn waste solvents as supplemental fuel. The 7/22/87 permit limited coal sulfur content to 1% and ash content to 10%. Due to waste regulations the burning of waste solvents was stopped. An 8/16/00 permit superseded the 7/22/87 permit and removed the references to waste solvents as a supplemental fuel. The Title V permit uses the 1% sulfur content and 10% ash content through streamlining. Kiln dried wood is the primary fuel used by the boiler, with coal as a backup fuel. The dry wood fuel is stored in a silo. Following installation of the Erie City boiler it was stack tested to determine compliance with its particulate limit. The results of the stack test showed that particulate emissions were less than 0.15 lbs/MMBtu. As part of periodic monitoring the Title V permit requires the source to test the boiler once each permit term for particulate emissions after it is restarted for regular use. Maintenance, inspection, and operator training programs are required for the boiler and multicyclone to insure that they are operating properly. Inspections of the boiler and control device shall be annual at a minimum. Records of the quantities of fuels used are required along with specifications of the fuels used. With the controls, required recordkeeping, testing, and required maintenance inspections it is felt that the margin of compliance is sufficient to assure compliance with the regulated limits.

Visible emissions for the Erie City boiler are limited to 20% opacity, except for one six-minute period per hour of 30% opacity. Included in the Title V permit is the requirement that the source develop maintenance, inspection, and training programs to insure the proper operation of the boiler and control device. Monitoring of opacity will require the source to at least one time per week observe for the presence of visible emissions from the boiler stacks. If visible emissions are present, a visible emission evaluation (VEE) must be conducted in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes. If any of the observations exceed the opacity limitation of 20%, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the boiler resumes operation within the 20% opacity limit. The source must maintain a boiler stack observation log to demonstrate compliance. The log will include the date and time of any observations, whether or not

there were visible emissions, the results of all VEEs, any necessary corrective action, and the observers name.

Woodworking (W1)

There are 39 wood dust systems at the facility for control of particulate emissions, 14 are controlled by fabric filters and 24 are controlled by cyclones. Four of the fabric filters are required by a 5/31/01 permit (BHS(A), BHS(B), BHS(C) & BHS(E)), five were installed as the result of a 1977 Consent Order (BH2, BH4, BH5, BH6, BH9), and one was installed voluntarily to replace a cyclone (BH10). The purpose of the consent order was to get sander dust emissions produced in the woodworking operation controlled by a fabric filter. One high efficiency cyclone (0007) was permitted 3/14/97 for particulate control from a log sawing operation cutting wet wood. The NSR permits require that particulate emissions from the permitted dust collection systems be controlled. In addition to the fabric filters some dust systems use a cyclone as a precleaner. PM and PM-10 limits for the permitted dust systems are based a particulate limit of 0.01 gr/dscf. The particulate limit of 0.01 gr/dscf for dry wood is easily attained when controlled by fabric filters that are operated properly and are below their capacity[1]. A particulate limit of 0.01 gr/dscf for wet sawdust can be easily attained by a high efficiency cyclone that is operated properly and is below capacity. The unpermitted dust systems must meet the particulate standard of 0.05 gr/dscf, as required by 9 VAC 5-40-2270. Again, this is easily attained when controlled by a fabric filter. Compliance with this standard is also attainable with the cyclones since the materials being controlled are of a relative large size because the sander dust is going to the fabric filters. Monthly inspections of the fabric filters is required and annual inspections of the cyclones is required to assure structural integrity of the cyclones. With the throughput restrictions, required controls, required recordkeeping, required maintenance inspections, and conservative emissions limits it is felt that the margin of compliance is sufficient to assure compliance with the permitted limits.

Visible emissions from the fabric filter exhausts of the permitted dust systems are limited to 5% opacity. Visible emissions from the non-permitted dust system fabric filter and cyclone exhausts are limited to 20% opacity by 9 VAC 5-40-80. Under normal operations there are no visible emissions from the control device exhausts. Any visible emissions would be because of a malfunction or poor operations and maintenance. Included in this permit are the requirements that the source develop maintenance, inspection, spare parts, and training programs to insure the proper operation of the control devices. Inspections of the fabric filters shall be monthly at a minimum. An annual structural inspection is required for the cyclones. Monitoring of opacity will require the source to at least one time per week observe for the presence of visible emissions from the control devices, log the observations, and take corrective action if necessary to minimize emissions. With the low potential emissions, it is felt that these maintenance and operation procedures will assure compliance with the opacity standard.

Finishing Room (F1)

Finishing at the facility's primary finishing operation in Plant 2 is not permitted. There is a permit for one repair spray booth (4623). Finishing in Plant 4 is covered by a 5/31/01 permit. Emissions from the finishing spray booths are PM and VOCs. All permitted spray booths are required to have particulate controls. While not required by permit two spray booths in Plant 2 have particulate controls. VOC emissions from the permitted finishing operations are based on the maximum capacity of the operation.

[1] When operating properly at 99.9% control efficiency emissions should be approximately 0.005 gr/dscf.

Visible emissions from the permitted spray booths are limited to 5% opacity. Visible emissions from the remainder of the finishing spray booths are limited to 20% opacity, by 9 VAC 5-40-80. In order to assure compliance the Title V permit requires the source to develop maintenance, spare parts, and training programs to insure the proper operation of the spray booths. To monitor opacity this permit will have the source, at least weekly, observe for any visible emissions, log the observation, and take corrective action if necessary to minimize emissions. It is felt that the monitoring will assure compliance with the opacity standard.

Wood Drying (DK)

Wood drying is done at the facility using 21 dry kilns, each with a capacity of 30,000 board feet. These units are not permitted. Drying time is at least 2 weeks. Heat for the kilns is provided either by a nearby co-generation facility or the source's boiler. The only emissions from the kilns are VOCs. Hardwood and softwood are dried at the facility. There are no applicable requirements for the VOCs emitted by these emissions units. Under normal operations there are no visible emissions from these units. The opacity standard for these units is 20%.

MACT requirements

Because this source has the potential to emit greater than 10 tons/yr of any single HAP and/or 25 tons/yr of any combination of HAPs it is subject to the MACT for furniture finishing. The source emitted greater than 50 tons of HAPs in 1996, therefore, its compliance date for the MACT was November 21, 1997. The source intends to use compliant coatings and averaging to meet the emission standards required by the MACT. As the source does not intend to use a control device to meet the emission standards, those portions of the MACT requirements dealing with control devices have not been included in this Title V permit. The source has submitted its initial compliance certification and to date has submitted its required continuous certifications.

Insignificant Activities

The source has 2 diesel powered emergency fire pumps (DFP). They are only operated for short periods of time for training and maintenance purposes. Operation of the fire pumps is less than 500 hours per year. Firefighting equipment is a listed insignificant activity under 9 VAC 5-80-720 A.

Located at various locations within the facility are 7 small parts washing tanks (PW). These are used to hand wash small parts during maintenance operations. The materials used in the tanks have a very low vapor pressure; therefore little is lost to the atmosphere. Potential fugitive emissions from these tanks are less than 5 tons per year. This is considered as an insignificant emissions level under 9 VAC 5-80-720 B.

Gluing applications (G1) at the facility take place in non-vented processes. Gluing is used to assemble the furniture components and is limited primarily to low VOC adhesives. Gluing operations are not covered by any NSR permit. With potential fugitive emissions from the gluing operations being less than 5 tons per year this operation is considered as an insignificant emissions level under 9 VAC 5-80-720 B.

At several locations within the finishing operation there are cleaning and dip tanks (CDT). VOC emissions from these tanks are fugitive. Both types of tanks are kept covered when not in use. Also the cleaning tanks are covered when in use. The facility does not use the dip tanks very often. These tanks have potential fugitive emissions less than 5 tons per year and are considered insignificant under 9 VAC

5-80-720 B.

The source operates a small waste oil boiler (WOB) for space heat purposes. The rated capacity of this boiler is 280,000 Btus per hour. It is considered as insignificant in size under 9 VAC 5-80-720 C.

Generally Applicable Requirements

Visible emissions from any emissions unit not specifically listed can not exceed 20% opacity except for one six-minute period in any hour of not more than 60%. This is in accordance with 9 VAC 5-40-80.

State-only Requirements

There are no state only requirements included in the Title V permit for this source.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under ' 111, 112 or 129 of the federal Clean Air Act.
d. Any requirement concerning accident prevention under ' 112(r)(7) of the federal Clean Air Act.
e. Any compliance monitoring requirements established pursuant to either ' 504(b) or ' 114(a)(3) of the federal Clean Air Act or these regulations.
f. Any standard or other requirement for consumer and commercial products under ' 183(e) of the federal Clean Air Act.
g. Any standard or other requirement for tank vessels under ' 183(f) of the federal Clean Air Act.
h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.

j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
l. Any standard or other requirement governing solid waste incineration under ' 129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state but is not federally enforceable is identified in the draft Title V permit as such.

REQUEST FOR VARIANCES OR ALTERNATIVES:

None

COMMENT PERIOD:

The public notice appeared in the Altavista Journal on January 16, 2002.

Beginning Date: January 16, 2002
Ending Date: February 14, 2002

All written comments should be addressed to the following individual and office:

Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
Lynchburg, VA 24502
Phone: (804) 582-5120 Fax: (804) 582-5125

PROCEDURE FOR REQUESTING PUBLIC HEARING:

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.